

Creative Crayon Recycling

Snapshot

Give old, broken crayons a new life in this hands-on recycling project.



Objective: Students will recycle crayons to demonstrate the three steps in the recycling process: collecting a material for recycling, turning it into something new, and using that new finished product.

Age Group: K-5th grade

Setting: Classroom or other meeting space

Project Duration:

- *Method 1:*
1 week or ongoing
- *Method 2:*
1 hour

Materials:

- *Method 1:*
 - Container for collecting crayons
 - Poster-making materials
 - Shipping boxes
- *Method 2:*
 - Container for collecting crayons
 - Muffin tin/molds
 - Oven

Why This Project Matters:

Children will wear down hundreds of crayons over the years they use them, and those stubs are usually put in the trash. Achieving Zero Waste means thinking about how to reuse or recycle every part of the waste stream, even crayons.

Project Summary:

Crayon collection is a fun activity that can be implemented by one classroom, a student group, or the whole school. It is also an opportunity to teach the recycling process: collecting a material, processing it into something new, and using the new products. The project can be implemented in two ways. One method is to collect crayons on a classroom or school-wide basis and then send them to a crayon recycler. Another method is to collect broken crayons and create classroom-made or home-made new crayons by melting and molding the old ones.

Implementation:

Method 1: collecting and shipping:

1. Establish a time frame for collecting and shipping crayons. This could be a week-long event near the end of the school year to coincide with cleaning out classrooms (see Locker Leftovers/Classroom Cleanout, Chapter 9), or an ongoing collection throughout the year. Allow students to bring crayons in from home.
2. Work with Crazy Crayons or another crayon recycler to learn which crayons they want and how to identify them.
3. Establish used-crayon collection stations for the classroom or entire school (students can help with the creation of collection containers and displays). Specify that only broken or unusable crayons are being collected, not crayons that can still be used.



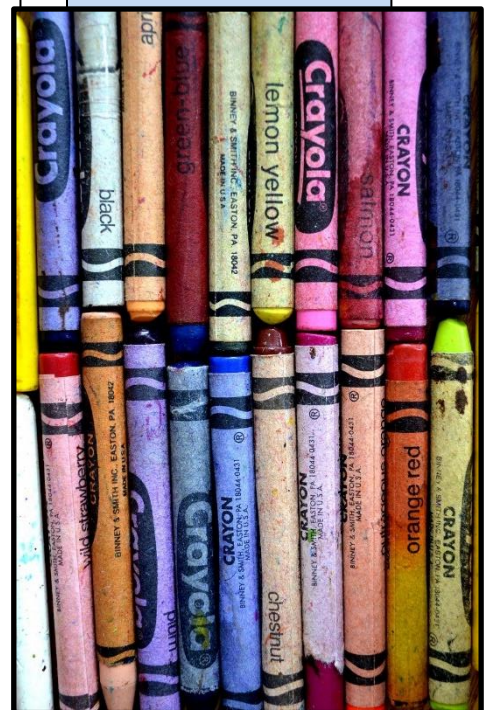
4. Have students write and read announcements during the crayon drive to encourage participation from their fellow students and staff. Students can also create posters showing examples of the kinds of crayons being collected and what they will be made into. These promotional materials should include information about the steps in the recycling process: collecting old crayons, processing them into new, and using the new crayons.
5. Sort through collected crayons, removing unwanted items (pens, trash, etc.). Send the shipment to the recycler.
6. Publicize the results of the collection (amount or weight of crayons collected, participating classes, etc.). A crayon-shaped “thermometer” chart would be a fun way to display this information. As crayons are received, calculate the sums and add to, or color on, the chart to show progress.
7. Find out where new recycled crayon products are sold in your area or on-line. Encourage families to look for recycled crayons (and other recycled school supplies) to “close the loop” of the recycling process by using these recycled supplies (see Eco-Wise School Supplies, Chapter 1).

Method 2: breaking & baking:

1. Establish used-crayon collection stations in the classroom or throughout the school, as described above. The collection could be a week-long event near the end of the school year to coincide with cleaning out classrooms (see Locker Leftovers/Classroom Cleanout, Chapter 9), or an ongoing collection throughout the year. Allow students to bring crayons from home.
2. Find and show students an internet video illustrating the crayon-manufacturing process to better understand what crayons are made from and how they are created in large quantities. Read storybooks about recycling to further their understanding of the process of collection, remanufacture, and using new products made from old (optional).
3. Discuss what natural resource crayons are made from (petroleum or plant-based oil). Bring in other items made from wax for students to examine, compare, etc.
4. Have students help remove all paper wrappers from the crayons. Break crayons into pieces.
5. Preheat the oven to 250 degrees Fahrenheit.
6. Fill the muffin tin with an inch-thick layer of crayon pieces. Colors can be combined or separated depending on your desired finished product.
7. Bake 15-20 minutes, or until the wax is melted.
8. Allow the tin to cool, then pop out the crayons and they’re ready for use.

Extensions:

- To share the class’s newly made crayons with other students, put together a traveling package that can be lent out to other classrooms. Include the students’ drawings of the recycling process.
- After a school-wide collection, investigate the possibility of purchasing some recycled crayons from the recycler. Distribute them as prizes or sell as a fundraiser.



Things to consider:

- If you don't have an old muffin tin to devote to crayon making, you can line your regular muffin tin with foil cups.
- Oven-safe, candy-making molds can also be used to create shaped crayons.
- Recycled crayons make a great no-cost gift or party favor.

Assessment:

- *Method 1:* Record the pounds of crayons collected and sent to the recycler.
- *Method 2:* Have students use their collected or homemade crayons to draw pictures of the steps in the recycling process.

Related Activities:

Eco-Wise School Supplies – Chapter 1
Locker Leftovers/Classroom Cleanout – Chapter 9
Special Materials for Recycling – Chapter 19

